



EPA Region 5 Records Ctr.



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February 9, 2004

Mr. Kevin Adler
Remedial Project Manager
U.S. Environmental Protection Agency, Region 5
Office of Superfund, Remedial & Enforcement Response Branch
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

Subject: Granville Solvents Site, Granville, Ohio
Response to USEPA Inquiry of Groundwater Capture by GSS-EW2

Dear Mr. Adler:

The groundwater pump-and-treat system at the Granville Solvents Site (Site) has maintained hydraulic control over impacted groundwater from its start-up in 1994 to the present. In October 2003, USEPA approved an operational change of the system in which GSS-EW1 was shut down and pumping from GSS-EW2 was increased. The two extraction wells had pumped an average of 250 gallons per minute (gpm). The operational change resulted in GSS-EW2 operating alone at an average rate of 270 gpm. This change, detailed in a January 31, 2004 letter to U.S. EPA, has improved the efficiency of the system by removing more impacted groundwater from the area where the greatest impact still exists, under the Site itself.

USEPA has inquired about the source of variability in the Site potentiometric surface that may result from variations in pumping rates of the nearby Village of Granville (Village) wells. The Village well field utilizes wells PW-2, PW-3, or PW-4, one well at a time, to meet the water supply needs of the Village. The variability of the Village pumping schedule results in some movement of the divide between the Site pump-and-treat system cone of depression and the Village well field. However, capture of impacted groundwater by the Site pump-and-treat wells is always observed.

Metcalf & Eddy of Ohio, Inc. (M&E) has contacted the Village and confirmed that they do not have a published schedule for the municipal well pumping rotation for supply wells PW-2, PW-3 and PW-4. The Village generally utilizes PW-3 and PW-4 significantly more than PW-2. During the last calendar year (2003), PW-2 was responsible for 20.6% of the volume of water pumped by the Village with the balance provided by either PW-3 or PW-4.

Capture of the Site plume exists under all of the Village's pumping scenarios. The change to operating GSS-EW2 only was done to improve the efficiency of the Removal Action by increasing the rate of contaminant removal in the vicinity of GSS-EW2 (the area of greatest impact), while still maintaining hydraulic control of impacted groundwater. The pumping of

only GSS-EW2 ensures that the groundwater divide between GSS-EW2 and GSS-EW1 is subject to capture and free of stagnation. M&E's evaluation of the groundwater divide when only PW-2 is pumping has shown that hydraulic control of the contaminant plume is maintained. M&E recently demonstrated this using the "worst-case" scenario of only PW-2 and GSS-EW2 pumping for groundwater capture at the Granville Solvents Site (M&E's January 31, 2004 letter to U.S. EPA, Figure 4). Based on the information provided by the Village (see paragraph above), the pumping of PW-2 is not a common condition.

We have adequate hydraulic capture of the plume with GSS-EW2 pumping at 270 gpm, even when PW-2 is operating. We will evaluate options to increase the discharge capacity for GSS-EW2, and M&E will forward potentiometric data to demonstrate capture of the Site plume through the operation of GSS-EW2 at a higher (300-350 gpm) pumping rate.

If you have any questions, please contact me at (614) 890-5501.

Sincerely,

METCALF & EDDY OF OHIO, INC.



Gerald R. Myers
Vice President/
Granville Solvents Site Project Coordinator

cc: B. Pfefferle, B&H – Steering Committee Chairman
W. Brewer, Duke University – Technical Committee Chairman
B. Nelson, M&E – Project Manager